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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,481	07/29/2003	Satoshi Arai	03457/LH	9696

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EXAMINER	
DINH, TUAN T	
ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/630,481	ARAI ET AL.	
	Examiner	Art Unit	
	Tuan T. Dinh	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 07/05,04/04,07/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Vince (U.S. Patent 5,068,631).

As to claims 1-2, Vince discloses an electronic circuit as shown in figures 1-5 comprising:

an integrated circuit (104, column 2, line 11) having power supply terminals (106-1-106-4, column 2, lines 18-22),

transmission line type noise filters (107-1-107-4, column 2, lines 24-42), disposed adjacent to said integrated circuit, for removing noises having a wide frequency band; and

a printed board (101, column 2, line 10) having a pattern (the pattern connected between the device 104 and the decoupling capacitors 107) for supplying a power supply to said power supply terminal of said integrated circuit through said transmission line type noise filter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vince (U.S. Patent 5,068,631) in view of Nakamura (U.S. Patent 6,333,844).

Regarding claims 3-6, Vince does not specific disclose said transmission line type noise filter comprises: a metal fine wire made of valve-action metal, said metal fine wire having a predetermined length; a sintered body formed on said metal fine wire, said sintered body being made of said valve-action metal, a dielectric film formed on a surface of said sintered body; a solid electrolyte layer formed on a surface of said dielectric film; a conductor layer formed on a surface of said solid electrolyte layer; a first and a second anode terminal connected to both ends of said metal fine wire, respectively, and a cathode electrode connected to said conductor layer, said sintered body formed by press-molding power of said valve-action metal, then sintering it in a vacuum at a predetermined temperature, and said sintered body is formed by winding a green sheet formed from slurry including power of said valve-action metal, around said metal fine wire as a core, then sintering it in a vacuum at a predetermined temperature, said dielectric film is made of an oxidized film of said valve-action metal.

Nakamura teaches a solid electrolytic capacitor (1) as shown in figures 1a-1b comprising a sintered body (10) of valve action metal (column 4, lines 9-10), a dielectric

layer (14) formed on a surface of said sintered body (10); a solid electrolyte layer (15) formed on a surface of said dielectric layer (14); a conductor layer (18, column 4, line 21) formed on a surface of said solid electrolyte layer (15); first and second anode terminal (2, 3, column 5, line 32) connected to both ends of said metal fine wire, respectively, and a cathode electrode (12, column 5, line 26) connected to said conductor layer (18), said sintered body (10) formed by press-molding power of said valve-action metal, and said sintered body is formed by winding a green sheet formed from slurry including power of said valve-action metal, around said metal fine wire as a core, then sintering it in a vacuum at a predetermined temperature, and said dielectric film is made of an oxidized film of said valve-action metal, see column 4, line 24 through column 5, line 36.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Nakamura employed in the capacitor of Vince in order to prevent an increase in impedance based on a thermal stress, which occurs between layers in a capacitor structure.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vince ('631) in view of Komatsu et al. (U.S. Patent 6,288,889).

Regarding claim 7, Vince does not specific disclose said transmission line type noise filter is an aluminum etched foil type.

Komatsu et al. teaches a capacitor (1) commonly electrical such as a noise filter as shown in figure 1 comprising an aluminum etched foil (9, 11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a capacitor having an aluminum etched foil as taught by Komatsu et al. employ the capacitor of Vince in order to increase more capacitances for the capacitor.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vince ('631) in view of Komatsu et al. ('889) as applied to claim 7 above, and further in view of Nakamura ('844).

As to claim 8, Vince and Komatsu do disclose said transmission line type noise filter comprises an aluminum-etched foil, the foil having an anode oxidized film (11) formed on a predetermined part of said aluminum etched foil; a conductive high molecular compound layer (7) formed on said anode oxidized film, except for a graphite and silver paste layer formed on said conductive high molecular compound layer.

Nakamura shows a capacitor (1) as shown in figures 1a-1b comprising a graphite and silver layer (16-18) formed on a manganese dioxide layer (15), see column 4, line 17-column 5, line 54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Nakamura employ in the capacitor of Vince and Komatsu in order to reduce stress and against thermal shock between layers of the time the solder reflow.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hatta, Sakata et al., Fujiwara et al., Kobayashi et al., and Asami et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Dinh
September 23, 2005.